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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/777,541

02/11/2004

Junji Sato

04086 /LH

5125

1933 7590 12/03/2007
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EXAMINER

RUDOLPH, VINCENT M

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

12/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/777,541

Applicant(s)

SATO ET AL.

Examiner

Vincent M. Rudolph

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takatsu ('702) in view of Hirata ('140).

Regarding claim 1, Takatsu ('702) discloses an image forming device (digital copier, See Figure 1; Col. 3, Line 23-27) includes a control unit (user I/F section, See Figure 1, Element 6) for accepting reservations of a plurality of jobs including an image forming processing (reserve for inputting a job, See Col. 4, Line 34-41, such as copying a document, See Col. 4, Line 56-65) and for carrying out a job successive execution for starting a next job during an image forming of a last page of a current job (whenever the current job is successfully completed, the next job is processed, See Figure 8C; Col. 9, Line 53-62), based on the plurality of jobs that the reservations are accepted (reserving a job and processing it based on the maximum amount accepted, See Col. 9, Line 19-29), an image forming unit (embodied within the digital copier, See Figure 1) for

forming and outputting an image on the transfer paper, based on an instruction from the control unit (output the document according to reserved user operated options, See Col. 9, Line 30-44), such that the number of reservation acceptable jobs is defined as $N2$, the control unit sets the $N2$ as $N2 \geq 1$, and manages acceptance of the jobs according to the set number of reservation acceptable jobs (the amount of available reserved jobs is set and managed by displaying the reservation tabs, so that whenever the maximum amount is met, a new reservation tab is not displayed, See Col. 9, Line 19-29, until a reserved job is completed, See Col. 9, Line 48-53).

Takatsu ('702) does not disclose a conveyance path for conveying a transfer paper from the start of a feed of the transfer paper to the end of an exit of it, as well as a case that the maximum number of the conveyed transfer paper existing at the same time on the conveyance path of the transfer paper from the start of the feed to the end of the exit in the image forming device is defined as $N1$.

Hirata ('140) discloses a conveyance path for conveying a transfer paper from the starts of a feed of the transfer paper to the end of an exit of it (the recording paper is conveyed from the paper cassette to the paper eject tray through the paper conveyance path and the timing roller (See Figure 1; Col. 4, Line 30-38) and the maximum number of conveyed transfer paper existing at the same time on the conveyance path of the transfer paper from the start of the feed to the end of the exit within the image forming device is defined as $N1$ (when multiple sheets of paper are continuously supplied, the are sequentially conveyed

at certain intervals, such that the maximum number of sheets depending on the paper size, See Col. 5, Line 45-54).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include a conveyance path and defining the maximum number of sheets on the same time on the conveyance path, such as the one disclosed within Hirata ('140) and incorporate it into the image forming device of Takatsu ('702) in order to reduce the conveyance time for outputting the job from image forming device as well as not overlapping (See Hirata ('140), Col. 5, Line 47-50) and, as a result, output the reserved jobs faster.

Regarding claim 2, Takatsu ('702) discloses an image reading unit (scanning section, See Figure 1, Element 1) such that the image forming unit forms the image based on the image data read by the image reading unit (scanned by the scanning section and outputted through the copying section, See Col. 3, Line 40-53).

Regarding claim 3, Takatsu ('702) discloses that the control unit is capable of accepting a reservation of a new job by exiting the last page of the job (once a previous job is completed, a reservation for a new job is able to be accepted, See Col. 9, Line 48-53).

Regarding claim 4, Takatsu ('702) does not disclose that the control unit receives the maximum number N1 of the conveyed transfer paper existing at the same time on the conveyance path of the transfer paper from the start of the feed to the end of the exit in the image forming device based on a main body identification signal.

Hirata ('140) discloses detecting the remaining amount of paper left in each paper tray from a sensor signal located within each tray (See Col. 4, Line 39-42).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include an identification signal within the main body of the image forming device, such as the one disclosed within Hirata ('140) and incorporate it into the image forming device of Takatsu ('702) because it allows the sensors to detect if a job is able to be completed based on the amount of paper remaining without having the user to refill it prior to completing the job.

Regarding claim 5, Takatsu ('702) discloses that the control unit sets the number N2 of the reservation acceptable jobs (See Col. 9, Line 19-29).

Takatsu ('702) does not disclose that the control unit sets the number N2 of the reservation acceptable jobs based on the N1 received from the main body identification signal.

Hirata ('140) discloses detecting the remaining amount of paper left in each paper tray from a sensor signal located within each tray (See Col. 4, Line 39-42).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to accept the amount of acceptable jobs from the amount of paper, such as the one disclosed within Hirata ('140) and incorporate it into the image forming device of Takatsu ('702) because it allows the user to know from the amount of paper remaining if a job is able to be reserved and completed without having the user to refill it prior to reserving the job.

Regarding claim 6, Takatsu ('702) discloses a display unit for displaying various information (See Figure 1, Element 6; Col. 4, Line 1-14), such that the control unit carries out a display on the display unit according to the set number N2 of the reservation acceptable jobs (the display displays the number of reservations so the user is able to see if a new reservation is able to be set, See Figure 7A-7F; Col. 7, Line 51-65).

Regarding claim 7, Takatsu ('702) discloses that the display unit displays a tag that corresponds to the decided number N2 of the reservation acceptable jobs (See Figure 7F; Col. 9, Line 22-29).

Regarding claim 8, Takatsu ('702) discloses a display unit for displaying various information (See Figure 1, Element 6; Col. 4, Line 1-14), such that the control unit controls the display unit to display the job display area, the number of the job display areas corresponding to the number N2 of the reservation acceptable jobs (See Figure 7F), and the control unit controls the display unit to assign information about each job of which reservation is accepted to each job display area in one to one relation (displays information such as the current status of the most recent job as well as if a new reservation is possible, See Col. 7, Line 51-Col. 8, Line 3).

Regarding claim 9, Takatsu ('702) discloses that the image forming device is connectable with a finisher (post transfer sheer treatment, See Col. 3, Line 48-53) and that the control device sets the number N2 of the reservation acceptable jobs as $N2 \geq N1$ with respect to the maximum number N1 of the conveyed transfer paper exiting at the same time according to the conveyance path that is

variable according to a model of the finisher as well as the presence or absence of connection of the finisher (user is able to use a predetermined amount of reservations for inputting a job, See Col. 4, Line 34-41, as well as include user conditions, See Col. 4, Line 1-14, stapling, punching, etc., See Col. 3, Line 48-53).

Regarding claims 10-18, the rationale provided in the rejection of claims 1-9 is incorporated herein. In addition, the image forming device of claims 1-9 corresponds to the method of claims 10-18 and performs the steps disclosed herein.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is: Suzuki (Pub. # 20020031364).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent M. Rudolph whose telephone number is (571) 272-8243. The examiner can normally be reached on Monday through Friday 8 A.M. - 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public

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11/28/07

VMR



Vincent M. Rudolph
Examiner
Art Unit 2625

KING Y. POON
SUPERVISORY PATENT EXAMINER